

Amendment to and Listing of the Claims:

Please cancel withdrawn claim 54, without prejudice to its inclusion in one or more related applications. Please amend the claims as indicated in the listing of the claims below.

1. (Original) A method of generating a differentiated human cell of a selected type, the method comprising maintaining an isolated human KDR⁺ stem cell in the presence of a differentiated mammalian cell of the selected type, whereby the stem cell differentiates to become the differentiated human cell of the selected type.

2. (Original) The method of claim 1, wherein the stem cell is maintained in contact with the differentiated mammalian cell.

3. (Original) The method of claim 1, wherein the stem cell is maintained in vitro in the presence of the differentiated mammalian cell.

4. (Previously Presented) The method of claim 1, wherein the stem cell is separated from the differentiated mammalian cell by a porous barrier, the barrier having pores of a size sufficient to allow the passage of molecules having a molecular weight less than 50,000 through the pores.

5. (Previously Presented) The method of claim 1, wherein the stem cell is isolated from a human hematopoietic tissue using an antibody that specifically binds with KDR.

6. (Original) The method of claim 5, wherein tissue is selected from the group consisting of an embryonic tissue, a fetal tissue, and a post-natal tissue.

7. (Original) The method of claim 5, wherein the tissue is an embryonic tissue selected from the group consisting of the aorta-gonad-mesonephros region tissue, yolk sac, and embryonic liver.

8. (Original) The method of claim 5, wherein the tissue is a fetal tissue selected from the group consisting of liver, bone marrow, and peripheral blood.

9. (Original) The method of claim 5, wherein the tissue is a post-natal tissue selected from the group consisting of cord blood, bone marrow, normal peripheral blood, mobilized peripheral blood, a hepatic tissue, and a splenic tissue.

10. (Canceled)

11. (Previously Presented) The method of claim 5, wherein the antibody is selected from the group consisting of KDR1 and KDR2.

12. (Canceled)

13. (Original) The method of claim 1, wherein the differentiated mammalian cell is a human cell.

14. (Original) The method of claim 1, wherein the differentiated mammalian cell is a cell of ectodermal origin.

15. (Original) The method of claim 1, wherein the differentiated mammalian cell is a cell of mesodermal origin.

16. (Original) The method of claim 1, wherein the differentiated mammalian cell is a cell of endodermal origin.

17. (Previously Presented) The method of claim 1, wherein the differentiated mammalian cell is selected from the group consisting of a skeletal muscle cell, an endothelial cell, and a differentiated hematopoietic cell.

18. to 45. (Canceled)

46. (Original) A method of generating a differentiated human cell of a selected type, the method comprising maintaining an isolated human KDR⁺ stem cell in a medium conditioned to reflect the presence of differentiated mammalian cells of the selected type in the medium, whereby the stem cell differentiates to become the differentiated human cell of the selected type.

47. to 89. (Canceled)